

CS 147 Project Expo

Design Thinking for User Experience Design, Prototyping & Evaluation

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Computer Science Department
Stanford University

Autumn 2024

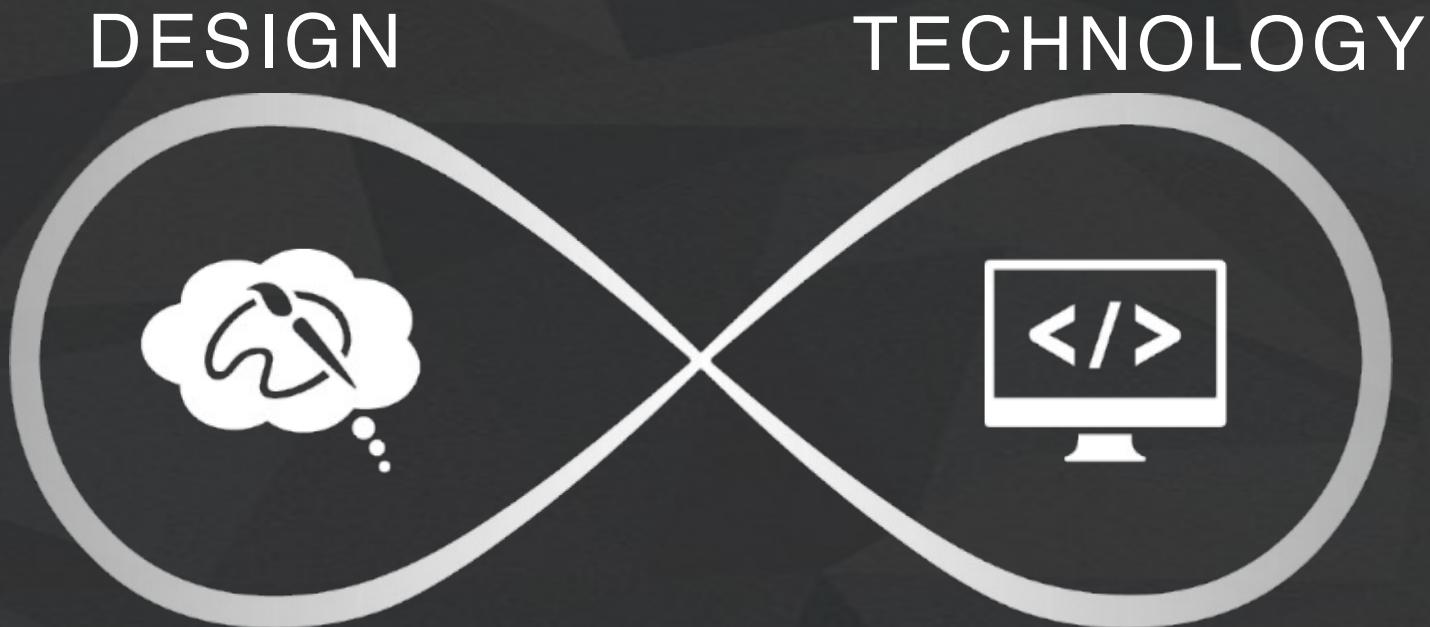
December 6, 2024

Outline

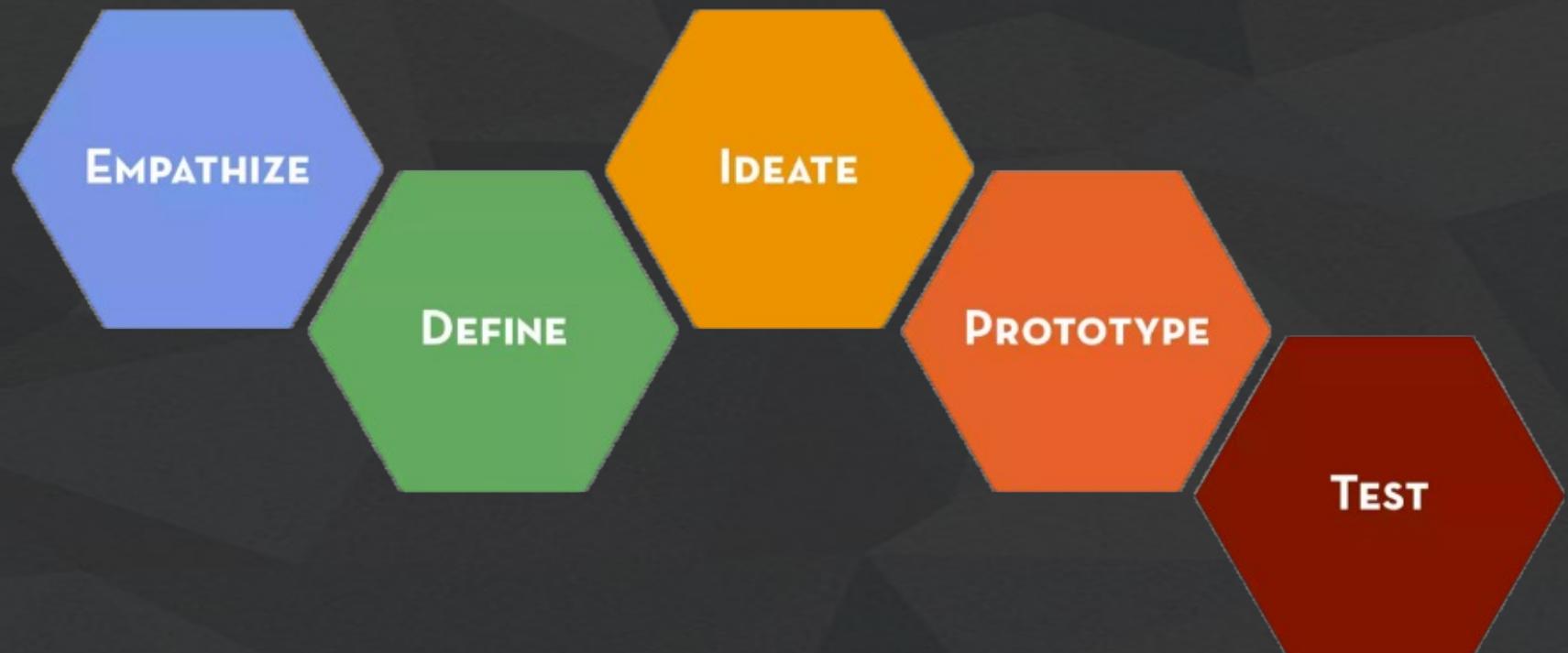
Course overview	6:00-6:25
Team pitches	6:25-6:55
Posters/demos/judging	6:55-8:45
Awards	8:45-9:00



Balance



Design Thinking Process



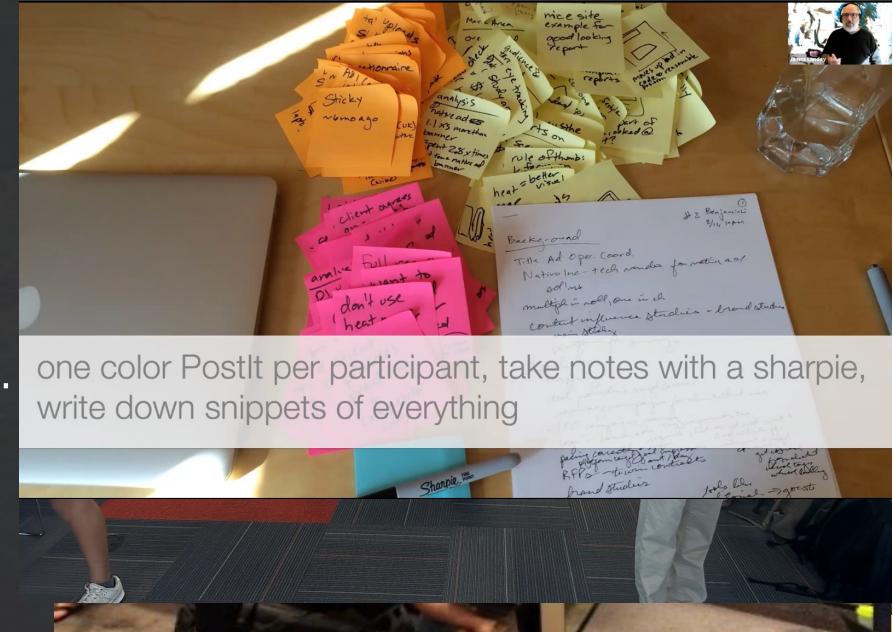
Goal of CS 147

Learn to design, prototype, & evaluate UIs

- Tasks, activities & practices of prospective users
- Cognitive/perceptual constraints affecting design
- Techniques for brainstorming, ideation & prototyping
- Methods for evaluating UI designs
- Importance of iterative design for usability
- Technology used to prototype UIs
- *How to work together as a team*
- *Communicating results to a group*

Project Based Course

- Iterative design of a real UI
- Theme: mobile
- Quarter long projects
- Students
 - ~115 across CS, Symbolic Systems ...
- 29 Teams
 - 3-4 members
- 10 major group assignments
 - group work is ~60% of course grade
- Four presentations
 - every team member presents



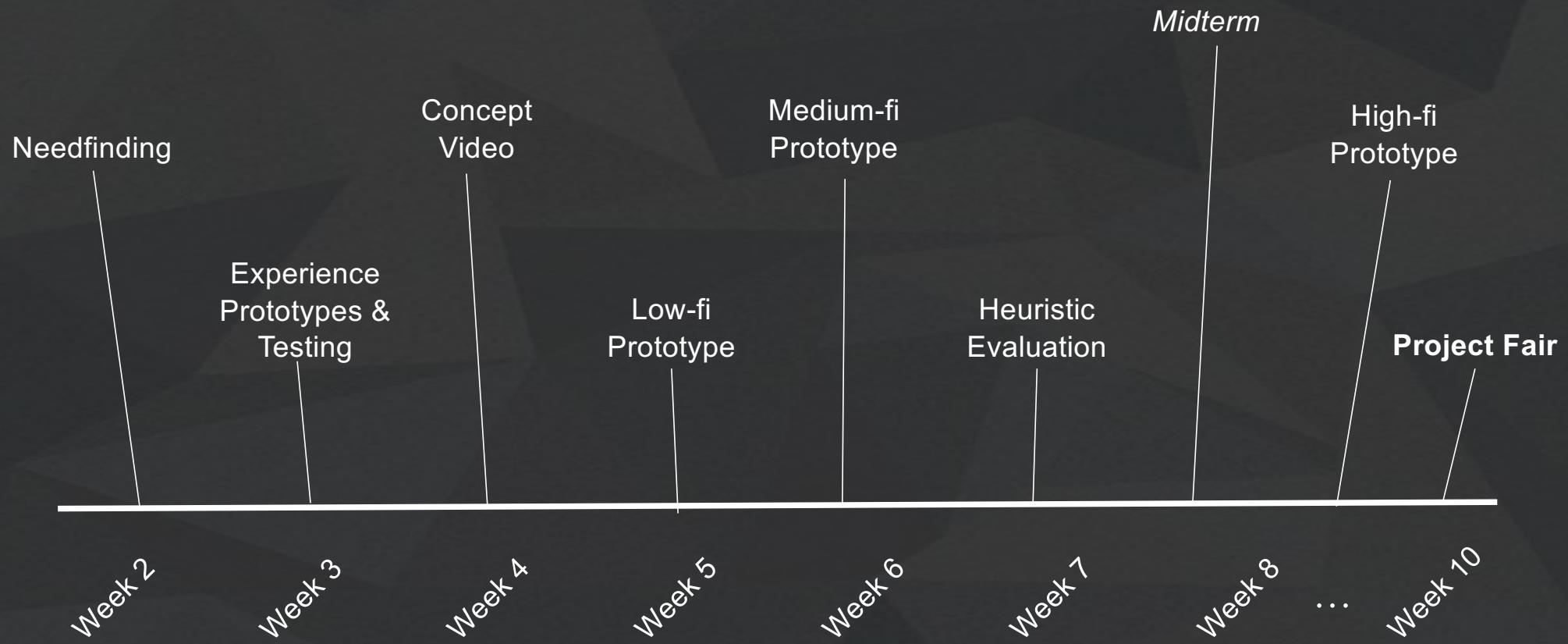
one color PostIt per participant, take notes with a sharpie,
write down snippets of everything

Design Studios

Teams attend small weekly studio (8-16 students)
-critique/feedback in more intimate environment

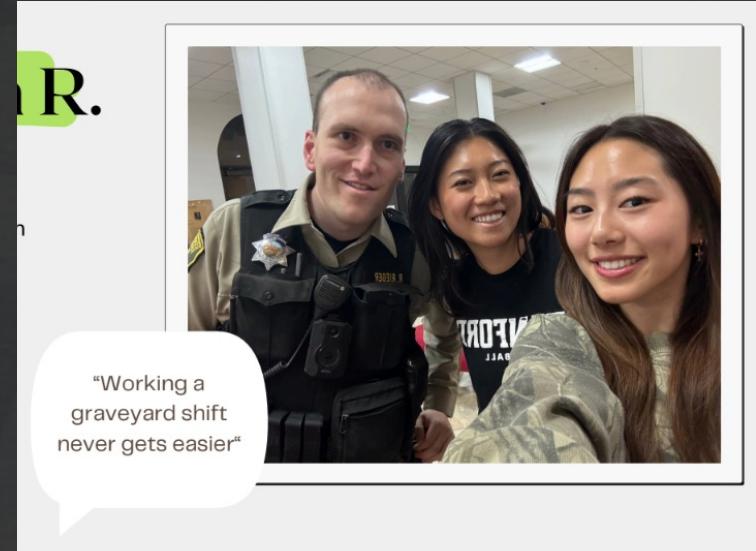


Project Process Timeline



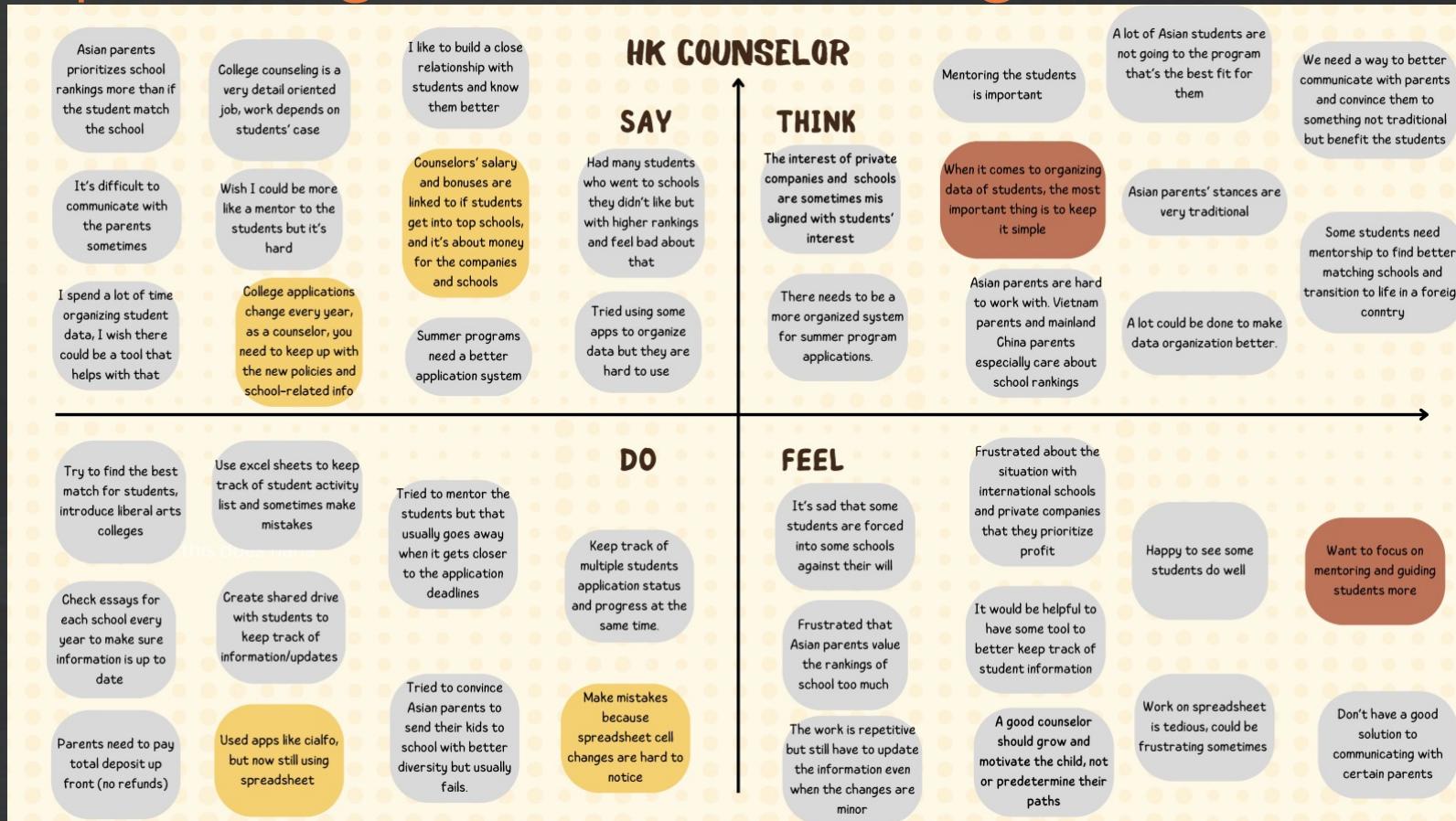
User-centered Design: Needfinding

- Observe existing practices for inspiration
- Make sure key questions answered
- Ethical questions in design w/ underserved communities



Lunar

Unpacking the Needfinding



Develop Point of Views (Person + Insight + Challenge) Brainstorm on How Might We Solve

WE WERE AMAZED TO REALIZE ...
(what did you learn that's new?)
IT WOULD BE GAME-CHANGING TO ...
(frame up an inspired challenge for yourself
don't dictate the solution)

All of us could take a risk to see a spark in others and
nurture it into a purposeful transformation.

HMW bring
routine (and
discipline)
less?

Experience Prototype to Test Assumptions



Pission

Experience Prototype to Test Assumptions

participants

1

Edith - Grandmother (88 yrs) with a lifetime of stories

A descendant of the mason who built Jordan Hall, she likes to share stories with her daughter.

2

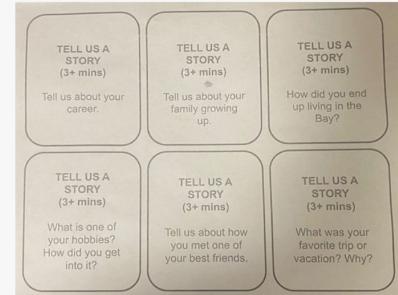
Vanessa - Writer (56 yrs) who enjoys fiction

Creating interesting narratives is part of her career and she is interested in the act of storytelling

3

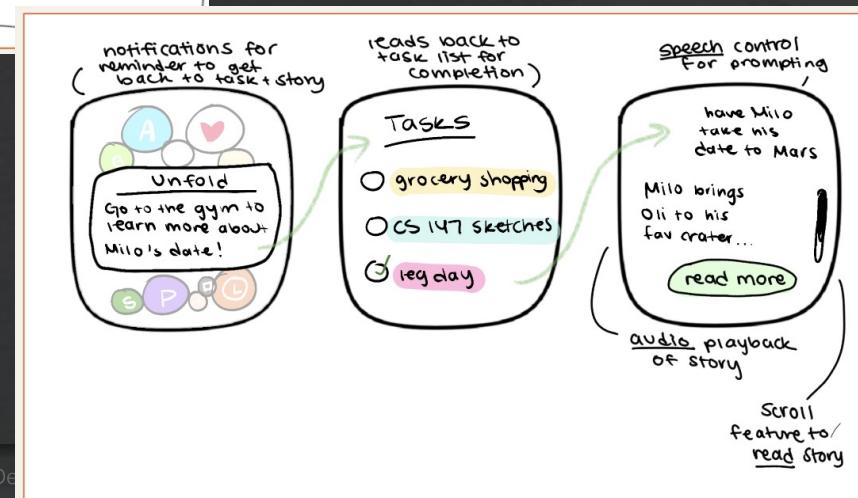
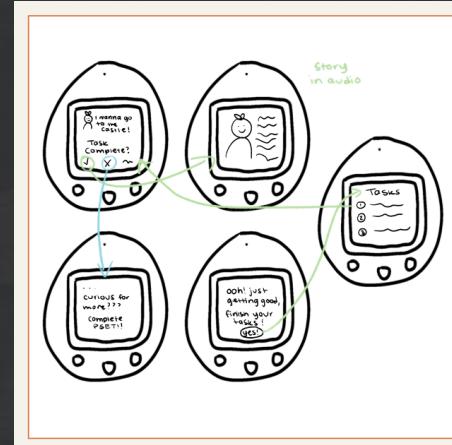
Corinne - Dancer and college student (22 yrs)

She is interested in learning about the stories of other people.



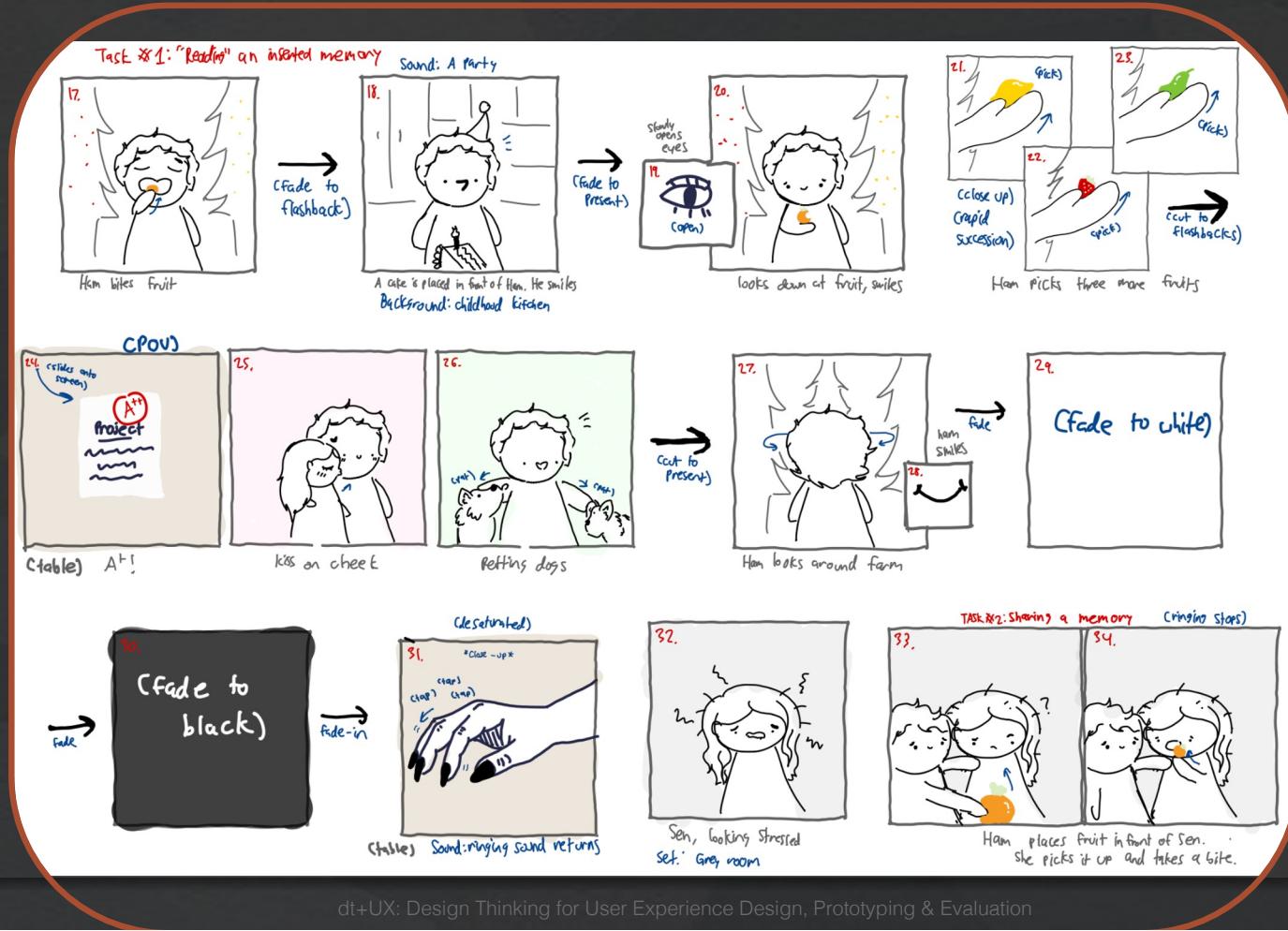
Lore

Sketching & Storyboarding



Unfold

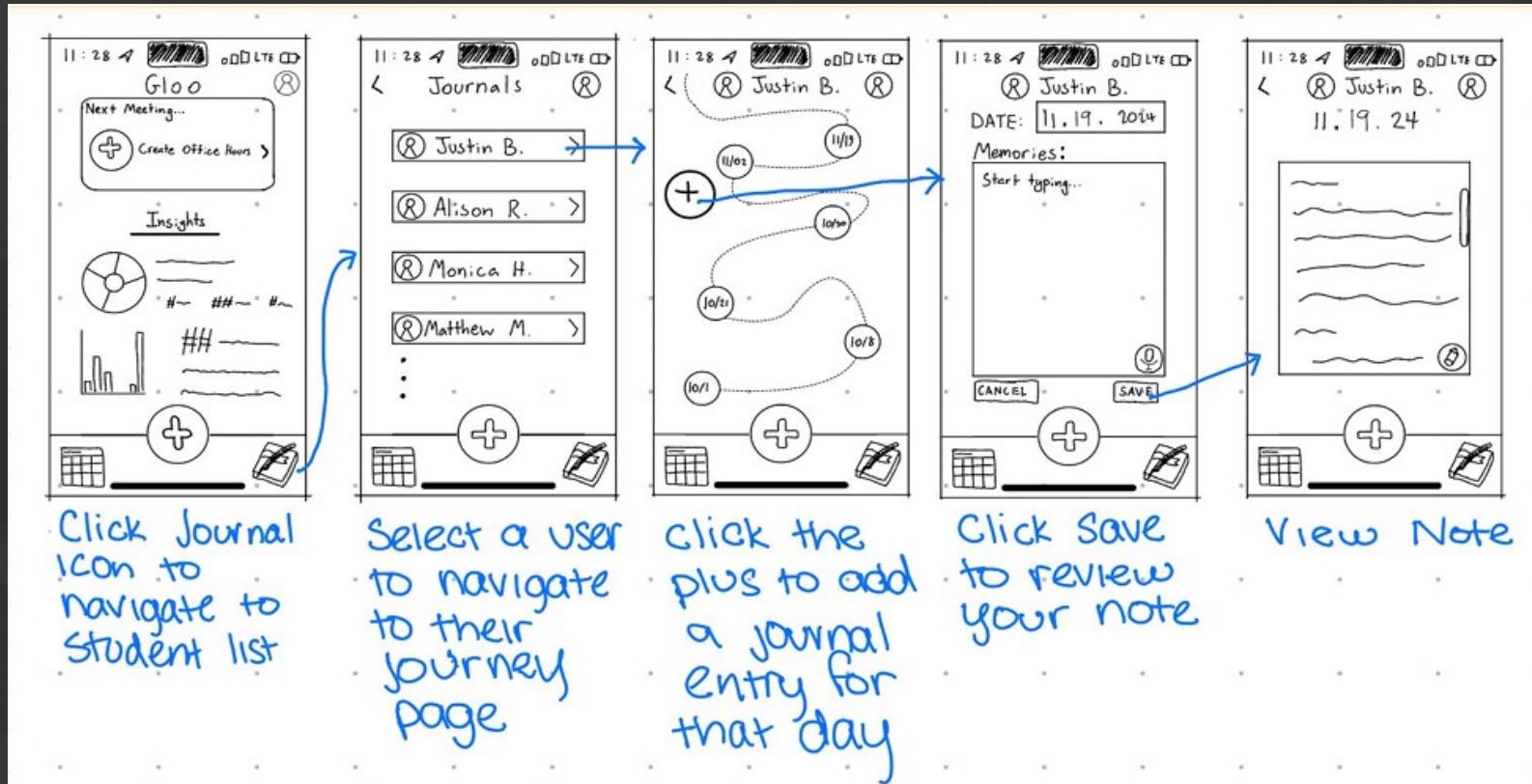
Concept Videos: Planning Storyboards



Concept Videos

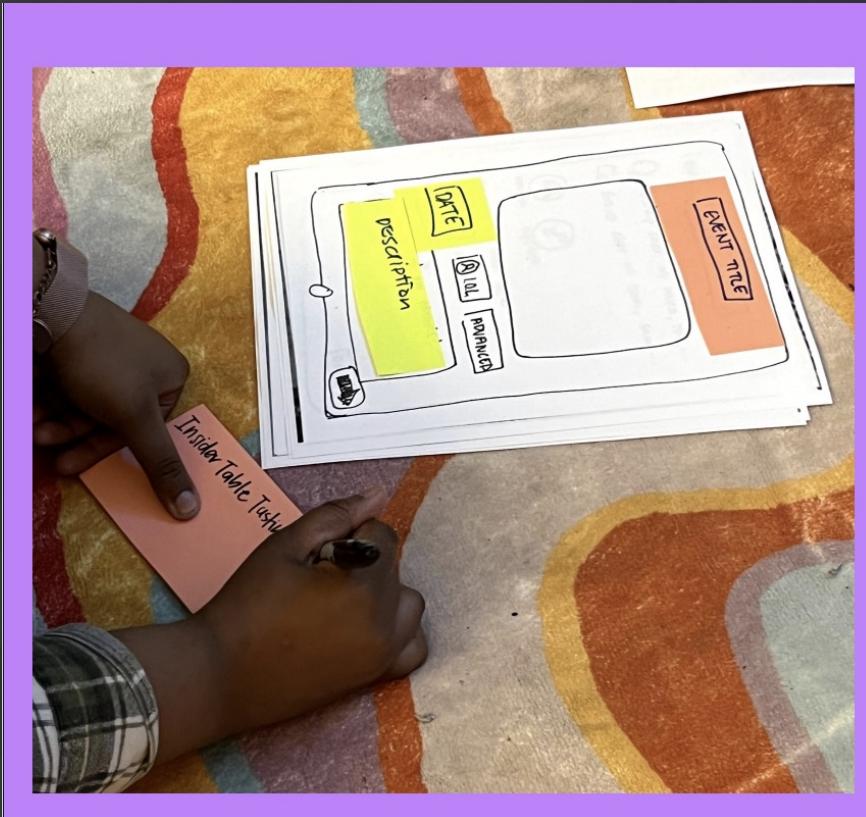


Low-fi Prototyping & Testing

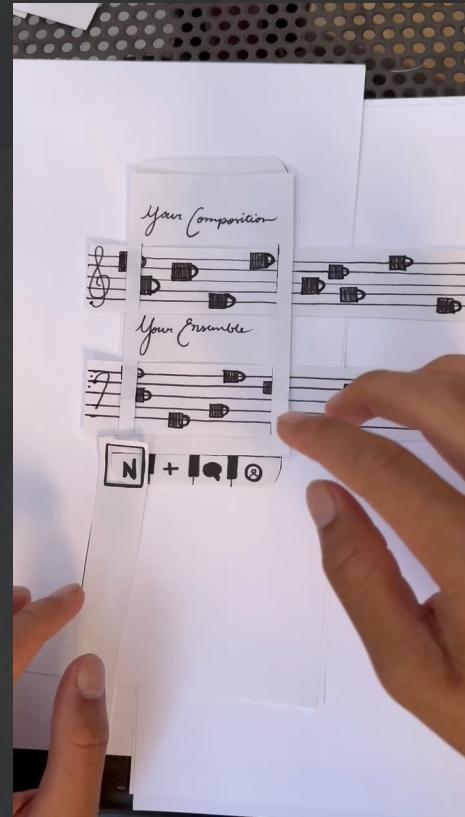


Gloo

Low-fi Prototyping & Testing



timelock



Noted

Interactive Prototypes

Medium Fidelity

The image displays a sequence of four mobile phone screens illustrating a user flow for a recommendation application:

- Screen 1:** Shows a dark purple background with a circular icon containing a stylized character. Below it is a large white arrow pointing right. At the bottom are three navigation icons: a circle with a dot, a house, and a square with a circle.
- Screen 2:** A calendar interface titled "Calendar". It lists events for "Today", "Tomorrow", and "Wednesday". The event "Flight to Philadelphia" under "Tomorrow" is highlighted with a purple oval. Below the calendar are three small navigation icons.
- Screen 3:** A movie recommendation screen titled "FLIGHT TO PHILADELPHIA". It shows a list of top movies. The first item, "Rocky", is highlighted with a purple oval. Below the list are three small navigation icons.
- Screen 4:** A movie detail screen for "ROCKY". It includes a large image of Sylvester Stallone, a summary, and links to streaming services. Below the main content are three small navigation icons.

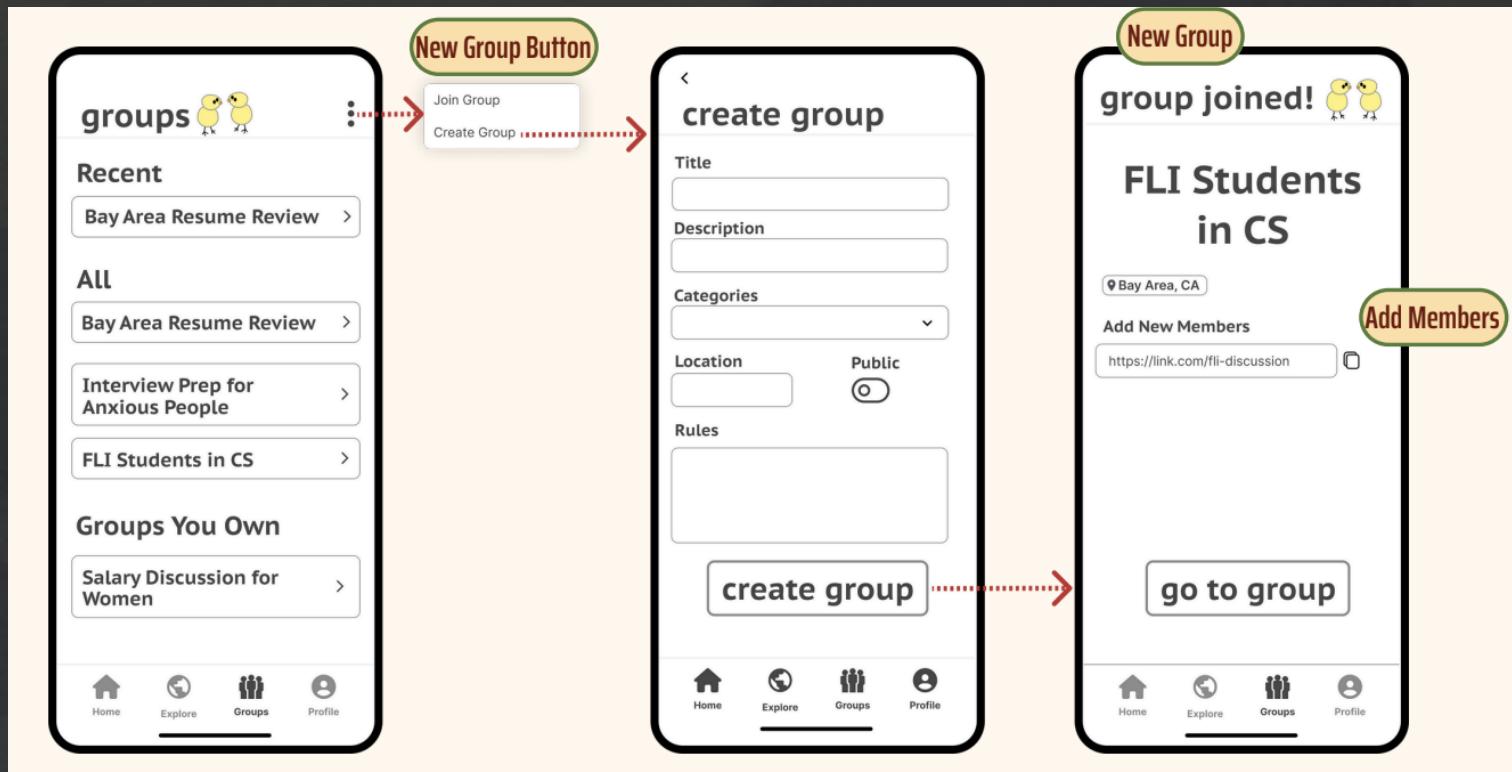
Below each screen are descriptive captions:

- Tap calendar icon or swipe right
- Select upcoming event/trip
- Pick from top three, or keep scrolling to find more
- Enjoy! See the "Why?" and links to streaming services

RecoMedia

Interactive Prototypes

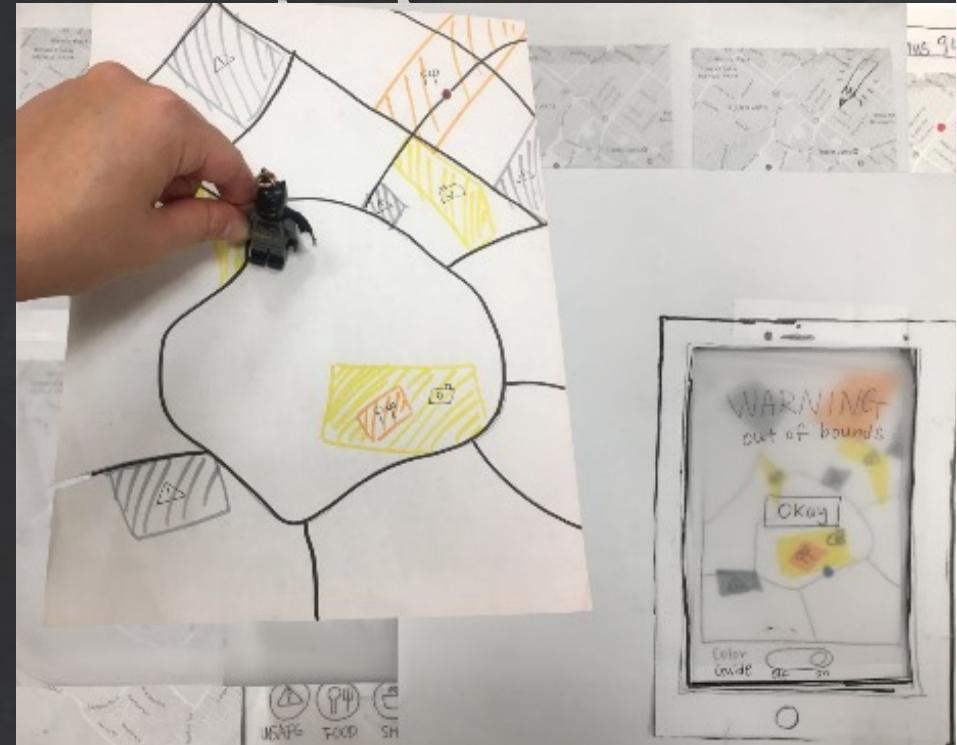
Medium Fidelity



hatcher

Evaluation

- Test with real customers (participants)
 - w/ interactive prototype
 - low-fi with paper “computer”
 - Low-cost techniques
 - expert evaluation (Heuristic Evaluation)
 - online testing



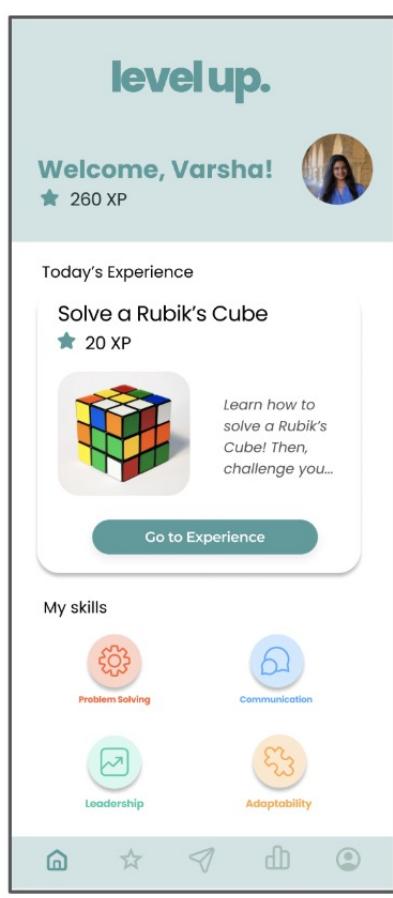
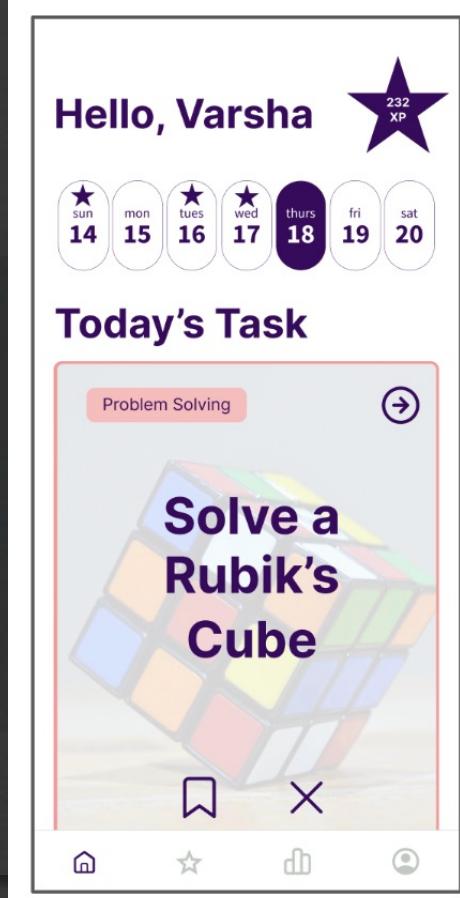
Wanderlust

Interactive Prototypes

Hi-Fidelity

LevelUp

LuckyDay



<http://cs147.stanford.edu>

- Project web sites w/ all materials

See What We Built! **Unfold**
Immerse yourself in our narrative-driven task-management app!

CONCEPT VIDEO PROTOTYPES TASK SCREENS

From Low-Fi to Medium-Fi

This is how we transitioned from the lo-fi prototype to the medium-fi prototype of the levels scene! We incorporated a retro theming to evoke storytelling and nostalgia in the user and set our app visually apart from others.

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<http://cs147.stanford.edu>

- Project web sites w/ all materials
- Lecture topics, slides, & video
- Homework assignments

The Projects

- 16 Judges will be picking the best projects (announced 8:45-9 PM)
- Students will have a say by voting for *The Students' Choice Award*
<https://tinyurl.com/cs147-au24-best-pitch>



Thanks! Get Involved!

- Mentor teams next year (mid-quarter feedback)
- Hire students and interns
- Support this project fair financially & HCI+Design research at Stanford

The Judges

- Siamak (Ash) Ashrafi
- Milton Chen
- Jane E
- Melissa Guyre
- Scott Jenson
- Matthew Jörke
- Kai Lukoff
- Joanne Ma
- Edmund Macaluso
- Nirav Mehta
- Joy Mountford
- Lizi Ottens
- Michelle Park
- Shriti Raj
- Jack Russo
- Leigh Soutter
- Yicheng “YC” Sun
- Sonia Tiwari
- Kelly Truong
- Tom Watson

THANK YOU!

FLORENCE
VENTURE PARTNERS



Computerlaw
Group
LLP

Entrepreneur Law Group PLLC

THANK YOU!

FOUNDATION FOR
CREATIVITY
IN DISPUTE RESOLUTION

The Projects

The Students' Choice Award

<https://tinyurl.com/cs147-au24-best-pitch>



We are checking your attendance based
on this and on Bingo!

The Judges

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THANK YOU!

FLORENCE
VENTURE PARTNERS



Computerlaw
Group
LLP

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THANK YOU!

FOUNDATION FOR
CREATIVITY
IN DISPUTE RESOLUTION

AUTUMN 2024

CS 147 – dt+UX

AWARDS

Students' Choice / Best Pitch

SpeakEasy

Unfold

PISSION

Best Poster

SpeakEasy

Superbloom

Unfold

Greatest Societal Impact

EKG

LuckyDay

Lunar

Greatest Personal Impact

Lore/Lockin

LockedIn

Superbloom

Most Novel Product

Superbloom

Mora

ConcertBuds

Best Website

Gloo

RecoMedia

Planet

Best Concept (3)

Atlas

Mora

FoodWise

Best Demo (3)

Universe

Pission

Unfold

Best Visual Design (3)

Superbloom

Lunar

Unfold

Bingo Raffle Winner

Matthew Mattei

Steve Dou

Evan Hsu

Best Overall Project

Unfold

Foodwise

Mora

Best Overall Teaching Team



Best Overall Teaching Team

